

**RECEIVED
CENTRAL FAX CENTER****MAY 21 2007****IN THE CLAIMS**

Please amend Claims 1 – 13 as follows:

1. (original) A nanostructure of an inorganic semiconductor material, characterized in that the nanostructure comprises a nanotube with a crystalline mantle and a hollow core.
2. (original) A nanostructure as claimed in Claim 1, characterized in that the hollow core has a diameter in the range of 2 and 20 nm.
3. (previously presented) A nanostructure as claimed in Claim 1, characterized in that the mantle has a thickness in the range of 1-20 nm.
4. (original) A nanostructure as claimed in Claim 1, characterized in that the hollow core is partially filled with the compound semiconductor material of the mantle of the nanotube.
5. (original) A nanostructure as claimed in Claim 1, characterized in that the nanostructure comprises a first zone having a p-type doping and a second zone having an n-type doping, the first and second zones having a mutual interface constituting a pn-junction.
6. (original) A nanostructure as claimed in Claim 1, characterized in that the inorganic semiconductor material is chosen from the group of III-V semiconductor materials.

7. (previously presented) A dispersion of nanostructures according to claim 1 in a solvent.
8. (previously presented) An electronic device comprising a first and a second electrode which are mutually connected through at least one nanostructure according to claim 1.
9. (original) An electronic device as claimed in Claim 8, characterized in that an insulating substrate with pores that are mutually substantially parallel is present, the pores extending from the first to the second electrode, in which pores the nanostructures are provided.
10. (cancelled) A method of preparing nanostructures of a compound semiconductor material, comprising the steps of:
- providing growth nuclei of an electroconductive material on a electroconductive surface of a substrate; and
 - growing the nanostructures by chemical vapor deposition at a growth temperature,
 - characterized in that the growth temperature is above a first transition temperature during a first growth period, therewith obtaining nanotubes having a crystalline mantle and a hollow core.

11. (cancelled) A method as claimed in Claim 10, characterized in that the thickness of the mantle is varied by variation of the temperature above the first transition temperature.

12. (cancelled) A method of manufacturing an electronic device, comprising the steps of
providing growth nuclei of an electroconductive material on a
electroconductive surface of a substrate, the surface being patterned so as to define a first
electrode;

growing nanostructures of a compound semiconductor material by
chemical vapor deposition at a growth temperature; and

providing a second electrode that is in electrical contact with the
nanostructures grown,

characterized in that the growth temperature is above a first transition
temperature during a first growth period, therewith obtaining nanotubes, having a
crystalline mantle and a hollow core.

13. (cancelled) A manufacturing method as claimed in Claim 12, characterized in
that during the growth first a first dopant is added to the vapor in the chemical vapor
deposition reactor and thereafter a second dopant is added, the first dopant being of a first
doping type and the second dopant being of a second doping type.